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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/079,662	02/20/2002	Michael J. Bader	10256A	7670
23455	7590	10/03/2003		
EXXONMOBIL CHEMICAL COMPANY P O BOX 2149 BAYTOWN, TX 77522-2149				
			EXAMINER CHEN, VIVIAN	
			ART UNIT 1773	PAPER NUMBER 4

DATE MAILED: 10/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/079,662

Applicant(s)

BADER, MICHAEL J.

Examiner

Vivian Chen

Art Unit

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 22-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-29 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

**DETAILED ACTION**

*Election/Restrictions*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-21, drawn to a multilayer film, classified in class 428, subclass 500+;
  - II. Claims 22-29, drawn to a method of making a multilayer film, classified in class 264, subclass 280+
2. The inventions are distinct, each from the other because of the following reasons:
3. Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product as claimed can be formed by lamination of preformed layers.
4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
5. During a telephone conversation with Mr. James on 8/18/2003 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-21. Affirmation of this election must be made by applicant in replying to this Office action. Claims 22-29 are

withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

*Claim Rejections - 35 USC § 103*

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over TOUHSAENT (US 6,013,353) in view of SCHUHMANN ET AL (US 5,554,245).

TOUHSAENT discloses a sealable multilayer polyolefin film comprising a polypropylene core layer, and a first skin layer comprising a polyethylene such as HDPE, and a second skin layer comprising a copolymer of ethylene, propylene, and/or butylene, wherein the film is uniaxially or biaxially oriented, and wherein one skin layer of the film is further metallized, and wherein the other skin layer of the film is optionally further coated with

additional layers such as an acrylic coating (claims 1-3, 16-17, 19-20). The film has a typical overall thickness of 0.5-3 mils wherein the skin layers individually have a typical thickness of 1-10 % of the total film thickness (claims 10-14). However, the reference does not explicitly disclose the use of a softening additive.

SCHUHMANN ET AL '245 discloses that it is well known in the art to incorporate 5-30 wt% low molecular weight hydrocarbon resin such as a cyclopentadiene polymer into the polypropylene core layer of a multilayer polyolefin film (claims 1, 4-9) in order to improve the barrier properties, optical properties, and dimensional stability of the film. (line 63, col. 2 to line 44, col. 3)

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use known hydrocarbon resin additives as disclosed in SCHUHMANN ET AL '245 in the polypropylene layer of the film of TOUHSAENT in order to improve the optical, mechanical, and other physical properties of the film. One of ordinary skill in the art would have used the disclosed films in conventional packaging applications and structures (claim 15). It would have been obvious for one of ordinary skill in the art to utilize other known polyethylene resins such as MDPE (claim 18) as one of the skin layers of the multilayer film depending on the specific thermal and mechanical properties desired for a particular end use.

9. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over:

(a) PEIFFER ET AL (US 5,508,090); or

(b) SPEITH-HERFURTH ET AL (US 5,945,225);

in view of KEMP-PRATCHETT ET AL (US 5,527,608).

PEIFFER ET AL '090 discloses a sealable multilayer polyolefin film comprising a polypropylene core layer and a skin layer comprising a copolymer of ethylene, propylene, and/or butylene, wherein said polypropylene layer containing 1-30 wt% low molecular weight hydrocarbon resin such as a cyclopentadiene polymer, wherein the film is oriented and has a typical overall thickness of 5-70 microns with the base layer comprising 50-95% of the overall film thickness (claims 1-2, 4-14, 20). (PEIFFER ET AL '090, lines 33-48, col. 2; line 35, col. 3 to line 47, col. 4; lines 1-30, col. 5; lines 7-17, col. 7)

SPEITH-HERFURTH ET AL discloses a sealable multilayer polyolefin film comprising a polypropylene core layer and a skin layer comprising a copolymer of ethylene, propylene, and/or butylene, wherein said polypropylene layer containing 2-20 wt% low molecular weight hydrocarbon resin such as a cyclopentadiene polymer, wherein the film is oriented and has a typical overall thickness of 5-70 microns with the base layer comprising 50-95% of the overall film thickness (claims 1-2, 4-14, 20). (SPEITH-HERFURTH ET AL, line 48, col. 2 to line 44, col. 3; line 3-44, col. 4; line 1-10, col. 5)

However the references fail to explicitly disclose the recited polyethylene or metal film layers.

KEMP-PATCHETT ET AL discloses that it is well known in the art to laminate multilayer polypropylene/copolymer films to metallized polyethylene film layers such as HDPE with typical thicknesses of 20-40 gauge in order to improve the mechanical and barrier properties of the resultant packaging material (claims 3, 12, 16-18, 21). (lines 40-48, col. 7)

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the films of PEIFFER ET AL '090 or SPEITH-HERFURTH ET

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AL with conventional functional packaging film layers such as metallized polyethylene films as disclosed in KEMP-PATCHETT ET AL in order to enhance mechanical properties, barrier characteristics, and/or durability. It is well known in the art to uniaxially or biaxially orient polyolefin films (claims 13-14) depending on the particular directional mechanical properties desired for a specific application. One of ordinary skill in the art would have used the disclosed films in conventional packaging applications and structures (claim 15). It would have been obvious for one of ordinary skill in the art to utilize other known polyethylene resins such as MDPE (claim 18) in the multilayer film depending on the specific thermal and mechanical properties desired for a particular end use. One of ordinary skill in the art would have applied additional known functional polymeric coatings (claim 19) to order to improve visual appearance, durability, and/or sealing properties.

10. Claims 1-9, 11, 13-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over SCHUHMANN ET AL (US 5,554,245) in view of KEMP-PRATCHETT ET AL (US 5,527,608).

SCHUHMANN ET AL '245 discloses a sealable multilayer polyolefin film comprising a polypropylene core layer and a skin layer comprising a copolymer of ethylene, propylene, and/or butylene, wherein said polypropylene layer containing 5-30 wt% low molecular weight hydrocarbon resin such as a cyclopentadiene polymer wherein the film is oriented and has a typical overall thickness of 20 microns (claims 1-2, 4-9, 11 13-14, 20). (SCHUHMANN ET AL '245, lines 46-57, col. 1; lines 42-55, col. 2; line 63, col. 2 to line 44, col. 3)

However the reference fails to explicitly disclose the recited polyethylene or metal film layers.

KEMP-PATCHETT ET AL discloses that it is well known in the art to laminate multilayer polypropylene/copolymer films to metallized polyethylene film layers such as HDPE with typical thicknesses of 20-40 gauge in order to improve the mechanical and barrier properties of the resultant packaging material (claims 3, 16-18, 21). (lines 40-48, col. 7)

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the films of SCHUHMANN ET AL '245 with conventional functional packaging film layers such as metallized polyethylene films as disclosed in KEMP-PATCHETT ET AL in order to enhance mechanical properties, barrier characteristics, and/or durability. It is well known in the art to uniaxially or biaxially orient polyolefin films (claims 13-14) depending on the particular directional mechanical properties desired for a specific application. One of ordinary skill in the art would have used the disclosed films in conventional packaging applications and structures (claim 15). It would have been obvious for one of ordinary skill in the art to utilize other known polyethylene resins such as MDPE (claim 18) in the multilayer film depending on the specific thermal and mechanical properties desired for a particular end use. One of ordinary skill in the art would have applied additional known functional polymeric coatings (claim 19) to order to improve visual appearance, durability, and/or sealing properties.



*Conclusion*

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

PEIFFER ET AL (US 5,496,600) and MURSCHALL ET AL (US 5,900,294) and DRIES ET AL (US 5,529,843) and SCHUHMANN ET AL (US 5,851,640) disclose polypropylene films containing hydrocarbon resins.

KONG ET AL (US 6,326,068) and KAWAKAMI ET AL (US 5,376,437) disclose polyethylene/polypropylene/copolymer laminates.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vivian Chen whose telephone number is (703) 305-3551. The examiner can normally be reached on Monday through Thursday from 8:30 AM to 6 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau, can be reached on (703) 308-2367. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

September 17, 2003



Vivian Chen  
Primary Examiner  
Art Unit 1773